

-2-

Amendment to the Specification

Please replace the paragraph beginning on page line with the following rewritten paragraph:

-- Referring to Fig. 1 in a first embodiment, an image display system ~~10~~ ¹⁰ includes an adjustable rest such as a chair 12, an image projector 14, an eye position detector including cameras 16 provided with light sources 19 for emitting non-visible radiation such as infrared radiation, and a controller 18. An example of an eye position detector suitable for use with the present invention is shown aforementioned European patent EP 0 350 957 A3. Components of the image projector 14 can be mounted to enable X-Y translation of the exit pupils for example on translation stages 11 and 13, respectively. Alternatively, an adjustable optical element or elements, such as a moveable mirror or lens can be employed to adjust the position of the image formed by the display system. The chair 12 is moveable for example in the X-Y and Z directions by a servo-mechanism 17 mechanically connected to the chair 12 and controlled by the controller 18. The servo-mechanism 17 may also be capable of rotating the chair about one or more axes such as the horizontal and vertical axes. Alternatively, the chair may be moveable with six degrees of freedom. In operation, the controller 18 first sets the position of the exit pupils by adjusting the image projector components to a nominal position that maximizes the image projector's range of adjustment. The eye position detector 16 located in front of a viewer 20 detects the position of the viewer's eyes. The eye position detector includes an image processor for detecting the location of the viewer's eyes within the image(s) produced by camera(s) 16 and generates eye-position information. This eye-position information is sent to the controller 18 and is compared to the exit pupil location provided by the image projector 14. If the positions are different, the controller 18 will adjust the position of either the projected image or the adjustable chair 12 to align the viewer's eyes with the predetermined image location. The adjustable rest 12 may include a head-rest 23 for positioning the viewer's head with respect to the projected image. Small, quick movements of the viewer's eyes are accommodated

-3-

by adjusting elements of the image projector to align the exit pupil(s) with the viewer's eye(s). Large, slow movements of the viewer's eyes are accommodated by moving the adjustable rest to relocate the viewer's eyes in the nominal position.